

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: [2315] 3B8CF
Message-ID: <9508071457.AA28918@rgfn.epcc.Edu>

For those that wish to check their QRP rigs on 30 with DX, Jacky, 3B8CF has been recently on 10.103+/-and does work QRP stations.(Must have the best ears in the world!). Worked him last eve at 0315Z with 4 W. So if you can hear him, you should be able to work him. Give it a try, and good luck. Ray, W5XE/V31XE, El Paso, Tx

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: rhaynes@metronet.com
Subject: [2333] 624 'Deluxe' QRP kit
Message-ID: <Pine.A32.3.91.950807170500.13934A-100000@aspen>

Looking at the Aug'95 issue of CQ I saw a QRP kit from 624 Kits in Dave Ingram's article. Having looked in the archives and not finding anything there I wonder if anyone has built or used the 624 'Deluxe' kit?

Tnx es 72's Richard

```

  _|_
  ( )===== ( )
  || Richard E. Haynes _____ Reply:rhaynes@csc.com ||
  ||
  || N5QXF ____ QRP-QRCI _____ NorCal QRP ____ NorTexQRP ||
  ( )===== ( )
  V

```

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: NYOUNG@nova.wright.edu
Subject: [2319] Camp Lamps and the like
Message-ID: <01HTSJQKU4UW935PGM@nova.wright.edu>

Back when Cindy worked as a pr person for the local power hegemony, she was involved in a piece of pr that got about as close as anything (and notice that's THING, as opposed to ONE, as in person) to cancelling our marriage. Part of the set up was something that the company called "Way To Go." We walked around for nearly three years saying "Dial 1-800 Way To GO" every time we saw somebody doing some sort of energy

efficient electrical rehab. Like when at work they replaced all the incandescent exit lamps with these squares of plastic filled with LEDs. Serious energy savings, so it seems.

So maybe Mike White (N9UXC) is right. Maybe there is a way around this camp lamp scenario. But what's beyond that is this idea:

I set a solar-warmed heat collector on the roof of the shack and let the ethylene-glycol (or whatever I choose as heat exchanger juice) kinda percolate through the system... expanded stuff shoving the cold and contracted stuff out of the way and into the solar collector. That way I wouldn't have to bring the radios in from the cold when winter comes. So I thought about that for a while. Then I got the idea that a small solar battery (or whatever the politically-correct term of the day is for those things that make motors turn in the Radio Shack window) to run a motor to push the slop around. And then I thought about having a valve system that would let me take the heat out of the shack in the summer and deposit it in a hole outside the shack, a hole which would need be only about 5 ft down, since the water table and chair are at about that depth anyway. And then I thought about getting solar cells to charge some batts and then I could run the shack without dimming the lights when I turn on the TR7 and the LINEAR (oh, knock it off! You know I have one.) And then I thought about how much this would cost me, even if I had the time and patience to do it myself.

Then I took a nap. I woke up having forgotten the whole idea and felt much better for it. Still, it was an interesting reverie, eh?

Dial 1-800 Way To Go. Lucky the Electrical Savings Dog will be waiting for your call....

73

Nils

WB8IJN &c

(So seriously, what'd you think of the idea? Plausible? Possible? Feasible? Do-able? Doo-doo-able? Fleas-able? Applaudible? Edible? Incredible? Unscheduleable? Regrettable? Blargh?)

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995

From: Monte Stark <ku7y@sage.dri.edu>

Subject: [2331] Just returned

Message-ID: <Pine.SUN.3.90.950807142841.2736B-100000@vortex>

Hi all,

We just returned from WIMU.

Will respond to all message asap.

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
...ku7y@sage.dri.edu.....Sun Valley, Nevada....
.....ARRL.....NorCal #330.....NRA LIFE.....

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: RAINS@NKU.EDU
Subject: [2334] Need help w/ baycom
Message-ID: <01HTSVOS2YIACG9FYQ@NKU.EDU>

Hello all, please don't flame me because this post is not qrp related.
I am having problems getting my BayPac modem to key my radio. My radio is an
Icom u2-AT. Has anyone else had problems like this, or have any suggestions?

Justin AA9KM
rains@nku.edu
t

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: ji3m@scubed.com (James R. Duffey)
Subject: [2336] Noncorrosive RTV, Beeswax, and VFO Stability
Message-ID: <ac4c549e010210047668@[192.31.66.240]>

JEVERHART (and others) writes about sealing electronics in Room Temperature
Vulcanizing (RTV) silicone sealant:

>Better yet, the curing process requires the presence of water vapor in the
>air.
>In the presence of a corrosive sensitive material like copper, this is a sure
>recipe for disaster! My fix was very simple - I replaced the damaged
>components and sealed the new ones with a specially formulated RTV,
>specifically RTV 3140. The latter is not corrosive because it does not use
>acetic acid in its chemical processes. But RTV 3140 is not commonly available.

It is, but you need to buy a whole case. However a similar sealant is
available as aquarium chaulk or sealant. It should be available at stores
that sell tropical fish supplies. The ones I have used do not require
release of acetic acid to cure, but they too requires absorption of
moisture (usually from the air) to cure, so if you use it allow it to cure
fully before sealing it to the atmosphere. This could take a while in dry
climates or during the winter when the air in houses is very dry. I know
from experience that moisture is necessary for a cure, having watched
someone try to seal a dry box with it, and having RTV that never cured, at

least for months and months!

If all you are concerned about is preventing VFO microphonics use beeswax which is available in most hobby shops. Melt a bit with a double boiler. If you don't know what a double boiler is, or you can't use the one that is normally used for cooking, put the wax in a can ,then put the can in boiling water. When it melts pour it onto your VFO so that it covers all the components. Usually a quarter inch or so is sufficient. Allow to set. This will prevent most of the movement of components with respect to each other and prevent microphonics. The wax can be removed with gentle heating for rework.

Duffey KK6MC/5

James R. Duffey ((505) 764-3143)
Maxwell Laboratories, S-Cubed Division
2501 Yale Blvd SE Suite 300
Albuquerque, NM 87106-4125
ji3m@scubed.com

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: Craig LaBarge <74740.3166@compuserve.com>
Subject: [2330] PA6QRP Special Event
Message-ID: <950807210009_74740.3166_EHB71-1@CompuServe.COM>

I came across this item in the 425 DX Report:

PA - From 25 to 29 August the special PA6QRP station will be activated to promote QRP operations. All HF bands activity, in CW and SSB, on usual QRP frequencies. QSL via bureau or via direct to: F.L.M. Boot PA3FYV, Ratelaar 44, 2954-ND Alblasserdam, Netherlands.

73, Craig WB3GCK

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: k1lgq@dennis.MV.COM (Dennis Marandos)
Subject: [2311] QRP AFIELD -New England QRP Club Contest
Message-ID: <199508070313.XAA20421@mv.mv.com>

Good people,

I am already thinking ahead and can't wait for the QRP AFIELD contest, sponsored by the New England QRP Club, so I want you to also think ahead. (September 16, 1995 - Saturday) After the contest, we have all kinds of ideas of what we should have done and where we could have operated, so plan ahead now and record what you're doing.

For the New England QRP Club newsletter, 72, I would like your thoughts BEFORE, DURING and AFTER the contest. Your comments would be great for the October issue and I'll PRINT them just as you saw it! So, keep track of your QRP locations, types of rigs, logistics (one lunch or two), the way you threw-up...your antennas, the band conditions in your area, the type of weather (WX) you experienced, the total number of strangers who asked you what the hell you are doing, all the little dumb things your forgot or burned up along the way, the pencil that was never sharpened, and...any pictures you think would create controversy.

Thinking ahead makes it easier for you to remember now what it is you want to say later. (Did I say that right?)

Send all your wonderful and not so great thoughts to me and I'll take it from there. I hope to hear from each and every one!

Another comment--if you haven't already sent me your e-mail address to be included in the October issue, send it today with the subject heading INTERNET ADDRESS. A big thank-you for those who have already responded. Your message has been received.

For your information, the New England QRP Club is still open for membership for \$10 the first year and \$7 thereafter. Address your new membership to:

Mr. William McNally - AE1D
7 Blueberry Road
Windham, NH 03087

72 and see you the air,

Dennis - K1LGQ
Editor - New England QRP Club newsletter

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: "Timothy J. Pettibone" <tpettibo@NMSU.Edu>
Subject: [2328] QRP+ Mobile w/Hamstick
Message-ID: <Pine.A32.3.91.950807134515.56735A-100000@hector>

Well, left Las Cruces with makeshift setup in my Caravan. Used mag mount from Lakeview. Spent 1 hr 20 minutes tuning up 75m, 40m, 30m, and 20m Hamsticks the day before. Cut the 30m too short, left it in garage.

Checked into NM Breakfast Club on 75m (kind of). SSB aint as good on the QRP+ but a little bitty whip doesnt' help. Put the YF on the steering as soon as we left Socorro (and enjoyed a visit with Paul Harden). Got on 20m, called CQ and got a call from Spokane WA. Then IL, then VA, then TX. Had my normal Sunday schedule with K6IC (not a QRPer but a good guy anyway) on 20m from Coronado State Park outside of Bernillio NM and on the road for another 10 minutes.

Went to Ridgway State Park in Colorado where my son and his family were camping. We stayed in motel! Had sched with K6IC everyday with spectacular sigs both ways.

Even though my windshield wipers went off with every key down (except when the Bencher was on my bare thigh) anytime the ignition was on, had a great time. Didn't do any grounding and used cigar lighter power cable. Should be really good if I ever get around to installing everything the right way. This was my first attempt at HF mobiling. Think I may want to get serious about it. The QRP+, by the way, worked very well. A little ignition noise but not bad. Still need to learn to drive and use the Bencher paddle balanced on my knee!

Tim AB50U

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2324] QRZ! Ham Radio CDRom
Message-ID: <199508071857.NAA29432@chuck.dallas.sgi.com>

Gang,

While down in Austin TX last Saturday for the big doings, I happened to pick up the July issue of the above CD. I wanted to see if my

database for the US wound up on it.

I just loaded onto my system here at work (during lunch) to check it out and load the FCC stuff to tape for the system at home. I sometimes look up a station when I hear them call CQ just to see what "real" zone they are located in. :-) Especially on 30M where I seemed to be wired into the great state of VA. Kinda like my direct line to YN1CC on 40M.

Anyway I browsing through all the directories and POW! A qrp directory catches my eye.

I find the following subdirectories:

```
chuck 55: ls qrp
00_index.txt  artwork/      direct.txt    qq_index.txt  reviews/
archives/     clubs.txt     files.bbs     qrp_ne.txt    was.ps
arctst/       description  ox_osc.ps     qrpproj.txt   wildcat.txt
```

The archives are the 93-94 files from previous sites.

The arctst is the my WAS, my DUP sheet, and ARCI log sheets for contests.

The artwork directory has the bark.gif, goodies.gif, and wb8ygg.gif. There are subdirectories for the NN1G Mark I and Mark II schematics and parts lists that I put in the ftp site.

The ox_osc.ps is my PostScript file for the International Crystal Co. OX Oscillator.

There is under the reviews directory the following files and I have not looked at them yet, but some are mine and some are yours.

```
chuck 72: ls reviews
00_index.txt  files.bbs     ne_30_40.txt  qrp_plus.txt  tentecsc.txt
accys.txt     grc109.txt    nn1g.kit      r1.kit         wildcat.txt
antennas.txt  heath.kit     norcal40.kit  radiokit.kit
ark40.kit     mfj.kit       oakhills.txt  spider.kit
description   mxm.kit       pubs.txt      tejas.kit
```

My point of this post: Everything that we say and do here is going to be permanent somewhere. We knew that, but we didn't know how permanent. We went through a discussion on copyright and stuff over a year ago and permission to reproduce etc. Remember boys and girls, it ain't free but on the information highway if it is at a ftp site it will be copied and it will be distributed.

This posting in no way to be taken as pointing a finger or complaining, but we need to include in each file it's history or pointer to who did

the work before others start taking credit. Been there and had that done to me. Mike C. and others have done as much work also that they have shared with us. Maybe we need a committee to come up with a notice and put it in each subdirectory of the ftp site.

As founder of the group let me start out with Doug Hendricks, Jim Eshleman (maintainer of the current qrp-l mailer), myself, Mike C. WA8MCQ, Steve Hideg (www guru), and two lawyers Doug Preston and Clark Savage to see about some organizational pins to put in place to cover the group. Others welcome and especially editors and publishers on the group. We'll take this offline and get back to the group for input and finalization.

I knew that with the information highway explosion, email, ftp sites and the quest and hording of information in general, that problems were bound to come up or at least irritations. Everyone wants free information. Ain't no such thing. We share and hopefully everyone benefits and puts something back into the "body of knowledge" that is growing by our sharing.

We just need to make sure that we have some control over how freely we get distributed. In fact, if we are being "redistributed" via any other electronic means, bbs, packet, etc. Those individuals need to notify this group and Lehigh.edu notifying them of same. It seems like common sense and courtesy should prevail here.

Off soap box and flame suit on.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-l@lehigh.edu Mon Aug 7 19:16:00 1995
From: kd7s@valleynet.com (Bill Jones)
Subject: [2309] Slingshoots, Fishing Reels and Dipoles
Message-ID: <199508070009.RAA11415@sierra.valleynet.com>

To my way of thinking, a QRP rig is an essential ingredient in any camping trip. I just returned from a weekender in the high Sierra in Central California.

My campsite was filled with hundred-foot plus Sequoia trees ideal for wire antennas. The problem is how to drag a piece of nylon line over a limb at ninety feet. I have been using the slingshoot/fishing reel combination with reasonable success. However, I don't think I have discovered the proper combination of line weight and sinker size or shape. For example, using fifteen pound test line and a one ounce sinker, I can't seem to get the line

up much above forty feet. Switching to six pound test line gets the line higher but now I find it almost impossible to drag a length of quarter-inch rope over a branch without breaking the line. I can't switch to the bow and arrow trick as park rangers get a little nervous. Suggestions sincerely appreciated.

72/73 de Bill - KD7S
kd7s@valleynet.com

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: ges@praxis.pcco.com (ges@240pob)
Subject: [2310] VFO Stability
Message-ID: <9508070301.AA09707@praxis.pcco.com>

John, K0JD recently said -

>I'm pretty finicky about VFO drift, being a musician with acute
>sensitivity to pitch. So I thought I'd share a few experiences in
>homebrewing 7 MHz VFO's and ask some other comments/advice.

>The simple Hartley circuit (such as W7EL's Optimized QRP Xcvr) never
>satisfied me -- it never seemed to settle down, with a slow drift downward
>that never stopped. (rest deleted)

For what its worth, I recently built a 5w/40m xmtr using the vfo from the Optimized QRP Xcvr (some parts substitution). When I first built it up using ugly construction, it didn't drift much, but had microphonic tendencies. I ended up mounting the toroid and caps that I could on a piece of pcb and potting them in silicone rubber. I didn't have any RTV so I used bathtub caulk. It doesn't reverberate now even if I try to make it. I have no sophisticated test equipment to check drift, but it seems to very good. I have left it on for two or three days and can't, with my untrained ears, tell that it has moved.

Glen E. Stockton
Bartlesville, OK

K5UP
ges@ppco.com

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: Clark Fishman (FSAC) <cfishman@fsac3.pica.army.mil>
Subject: [2326] VFO Stability

Message-ID: <9508071536.aa01095@FSAC3.PICA.ARMY.MIL>

Try the T68-7 core for your next VF0..the 7 material
has a lower temperature coefficient than the 6 material.

Keep on oscillating

wa2unn

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: Mike White <mpw@chensys.com>
Subject: [2316] Re: Camp Lamps
Message-ID: <9508071459.AA05973@puma>

At 05:44 PM 8/3/95 EDT, you wrote:

>In a short discussion about portable operating the subject of portable, "qrp"
>lighting for that night-time operating session or contest.

>

>What interesting, innovative ideas are out there?

Home Power Magazine discussed an interesting little gadget called the LED
Illuminator. Basically, it's an assembly of 30 (more or less) LEDs.
Output of the light is about 90 Candela's operating off of a 12 Volt source.
Current drain is 150mA. (This is from the article - I can't vouch for these
claims.)

The illuminators are made by Bill Mack of Delta Light in Minneapolis, MN.
Telephone: 612/894-6904.

While I'm at it, Home Power is a pretty neat little mag: the authors do
as they preach - most are completely off of the Grid. The mag has interesting
info on Micro-Hydroelectricity/Wind/Solar. 916/475-0830: You should be able
to get an evaluation copy for free...

--

Mike White Chen Systems Corporation
Amateur voice:715/833-7860
Radio fax :715/833-7096
N9UXC

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: Jim.Nestor@ey.com
Subject: [2314] RE: IOTA info needed
Message-ID: <00145000014772960000002*@MHS>

Mill,

The Maine Islands are divided into two groups. Those East of 69W and those West of 69W. Don't have a map handy, but I'm pretty sure that the Long Island/Casco group is in the same area as Orrs Island where I operated last year. That group is NA-137.

The East group includes Mt. Desert Island (Bar Harbor, etc.) and that is NA-55.

I will be in the Portland area the evening of the 12th of August then on the Mt. Desert Island on the 13th and on the Nova Scotia. Will look for you on 30m. Just finished SWL30 and haven't got time to fine tune it. Right now only covers from 10.110 - 10.130. Do you have an operating schedule in mind?

72,

Jim

>Can someone help me with IOTA background information, and particularly with
>an
>IOTA number for Long Island, Maine? (Maine has several "Long" Islands ...
the
>one of interest to me is located in Casco Bay, just off Portland.)

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: JEVERHART@cayman.vf.mmc.com
Subject: [2327] RE: IOTA info needed
Message-ID: <950807155541.2023d163@carib.vf.mmc.com>

Guys,

Gotta chime in again (and thanks to Jim Nestor). I, too will be in Maine this week. Although I will be in Bar Harbor, Me on Aug 10, 11 and 12, the operating schedule is not firm. My wife has some ideas about playing tourist and relaxing, while I wanna get on my ham rig!

I will have my 30-40 and NC-40A along so I will be on at least 30 meters, and possibly 40 as well. Most likely I'll be on evenings when I can erect an antenna on the balcony of my motel room - it overlooks the Harbor so goodness knows what direction will be favored. Look for N2CX on NA-55!

BTW, I may also be able to get on from Cadillac Mountain, elev 1530 feet using

a fixed mobile installation. This would be daytime stuff if I can convince the XYL :-). After all, it's my vacation too! (Sorry honey).

If the pileups are big enough, I'll write it up for one of the QRP newsletters.

72/73,

Joe E., N2CX

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: mitchell@dtcs70.dtc.Kodak.COM (Brad Mitchell)
Subject: [2325] Re: QRZ! Ham Radio CDRom
Message-ID: <9508071929.AA01922@dtcs70.dtc.kodak.com>

Yeah, I had heard that that really crummy wb8ygg.gif ended up on the cd rom!

Too bad that these were not better images. Oh well!

The problem with the whole scenario, is one that we've discussed over and over and over again.. If you think that it's something that you want to make money off of, don't post it. Unfortunately for us, many of us have ideas in our heads that we just will not share, for the oft chance that some day we might actually do something about it..

Darned if you do, and darned if you don't !

73 and keep the QRP spirit alive.. somehow..

Brad WB8YGG

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: aa7qy@primenet.com (Roger Hightower)
Subject: [2312] Re: Slingshoots, Fishing Reels and Dipoles
Message-ID: <199508070454.VAA08906@mailhost.primenet.com>

>Switching to six pound test line get the line higher but now I find it
>almost impossible to drag a length of quarter-inch rope over a branch
>without breaking the line.

Try using parachute cord, available in most sporting goods stores.
It's light enough, and strong enough to replace the 1/4" rope. Works for me.

73, de Roger, AA7QY

aa7qy@primenet.com NorCal #1099
rhigh@aztec.asu.edu

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: burdick@interval.com (Wayne Burdick)
Subject: [2321] Re: survey of Wilderness '40A builders
Message-ID: <199508071801.LAA14634@interval.interval.com>

Charlie, You should have tons of A.F. output.

I'll lay money that you've got the primary and secondary windings reversed on one of the transformers in the product detector stage. This happened to at least a couple of other builders.

I also saw your second message that you fried it. Oh well. My guess is that you've zapped the voltage regulator. Call Bob Dyer at Wilderness for other suggestions.

73,
Wayne

>2) There is hardly ANY audio. With R8 up all the way, can barely hear.
> What might *I* have done wrong to get such puny AF levels.
>

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: LVE1@inel.gov (Larry East)
Subject: [2318] RE: T-Kit Speech Processor
Message-ID: <9508071648.AA03127@garnet.inel.gov>

>Just finished building the Ten Tec Speech Processor, what a job !

(...snip...)

>
> I found one error in the manual, they say to install
>R22 twice, the second time, they meant R19 (the processor gain pot). I think
>you'll be pleased with this one. The same circuit is used in the Omni-6 and
>the Paragon 2.

>
>72, Byron WA8LCZ Detroit
>

Mine had another error; the decoupling cap at the input of the output op-amp is shown with reversed polarity... better check yours. It will work with the reversed cap, but the cap will probably eventually blow.

Hope the cap is installed correctly in the Omni and Paragon...

72, Larry W1HUE/7

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: Steven Wilson <randyw@crl.com>
Subject: [2320] Re: VFO Stability
Message-ID: <Pine.SUN.3.91.950807104028.1062B-100000@crl8.crl.com>

BATHTUB CAULK will eat up copper and other metal type things. If it has a vinger smell it will attack metal..... I know from experience having sealed a PC Board in it. Looks nice, ran very good for about 90 days. The copper just disappeared from the board. de stan ak0b

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: JEVERHART@cayman.vf.mmc.com
Subject: [2322] Re: VFO Stability
Message-ID: <950807144016.2023d163@carib.vf.mmc.com>

randyw@crl.com writes:

> BATHTUB CAULK will eat up copper and other metal type things. If it
> has a vinger smell it will attack metal..... I know from experience
> having sealed a PC Board in it. Looks nice, ran very good for about
> 90 days. The copper just disappeared from the board. de stan ak0b

Boy does he ever speak the truth! I have some related experience.

Back in the days when Iran was a valued ally (and very good customer for military and other hardware), I designed some equipment for a company that had Iran as a customer. Since the stuff was going to be exposed to the elements (weather, but no like Dayton, so don't grouse!), we "potted" our assemblies with a foam material. (Gee that's not a bad run-on sentence but it's not world class like NILs's :-)). Anyhoo, the foam potting material

intentionally expanded as it set to ensure that it filled all of the nooks and crannies to keep out nasty stuff like moisture and desert sand. Being a conscientious engineer (how many of them do you know that could deliver that word without a dictionary or spell-checker?), I carefully sealed relays and potentiometers so that the potting foam could not get inside.

After several months of outdoor exposure the electronics stopped working! It seems that the pots I had worked so carefully to seal and protect, developed a severe case of corrosion. Chemical analysis showed that the corroded material inside the pots was copper acetate. AHA! It seems that ordinary RTV and bathtub caulk (and most ordinary silicone sealing caulks) generate acetic acid during the curing process - that is what makes the familiar vinegar smell. Better yet, the curing process requires the presence of water vapor in the air. In the presence of a corrosive sensitive material like copper, this is a sure recipe for disaster! My fix was very simple - I replaced the damaged components and sealed the new ones with a specially formulated RTV, specifically RTV 3140. The latter is not corrosive because it does not use acetic acid in its chemical processes. But RTV 3140 is not commonly available.

The bottom line is that I do NOT recommend ordinary RTV anywhere that will expose a corrosive metal to moist conditions. Use something more benign.

BTW, if you read thru all of this you definitely do not have Attention Deficit Disorder but perhaps altogether too much free time on your hands (watches on your hands instead of vice versa?) I must be reading too much of Nils' stuff lately. It's starting to make sense.

72/73,

Joe E., N2CX

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: <CBAILEY@PAMDT.ANG.AF.MIL> (MSgt Cameron C.R. Bailey)
Subject: [2323] Re: VFO Stability
Message-ID: <heH8+bxZ7kA@PAMDT.ANG.AF.MIL>

Yes you are correct. We used to use Bathtub Caulk sealants to seal replacement antennas on aircraft. The Air Force does not approve it for that use. There are approved sealants known as potting compounds. The ones that comply with MIL specifications are known commonly as RTV (Room Temperature Vulcanizing). They are in most cases a two part mixture. Some of the ones used on aircraft can withstand temperature extremes. Be careful, some potting compounds are known as reverting potting compounds. They will revert back to liquid after 2 years to reseal connectors. They can be messy. There are some encapsulants out there for sealing cable splice cases. Talk to your telephone/catv friends. I don't know if you can buy small quantities

of it.

I prefer to use the insulating varnish (GLYPT) on coil forms. There are other special coatings you can use made just for coils called Q-dope. If you are not concerned with heat, you may consider using sealing wax. It is easy to remelt. Don't let your circuit in the hot sun though. :^) Chuck would have problems.

72 de kt3a

Cam Bailey
SOGNET LAN Administrator (Banyan)
211 Engineering Installation Squadron
Fort Indiantown Gap (Annville) PA
DSN: 491-8737 Comm: 717-861-8737 FAX: 8268

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: N5EM@aol.com
Subject: [2329] Re: VFO Stability
Message-ID: <950807165529_132614309@aol.com>

>But I'm coming to the conclusion from my experiments and some concurring
>messages, that air core coils are quite superior.

John,

Of that there is no doubt. Air cores are superior to anything with core with regards to temp. stability and, generally Q because to be self-supporting, they are wound with larger wire. Problem is, most projects now-a-days don't have room in them. Consider the VFO coil you are working on. How big would it have to be to work on 40 meters and how much space would you have to leave around it to avoid unwanted coupling problems. We would probably be much better off, in general, if we used larger cases and air solenoid inductors because we wouldn't be as tempted to cram everything together into a Sucrets box (oops, Altoids box).

Consider the W1AW problem with the QRP+. By simply re-routing a coaxial cable, the problem is cleared up or greatly reduced. There's a lot of stuff in that little package. Now, don't misunderstand. I love the Plus. I'm glad that Index got it into that little package. It just highlights the problems of unwanted and unexpected interaction when you get everything so close together.

Begining builders take note. If you are building from scratch without the benefit of a kitted design that SHOULD assure reproducibility, don't pick a

case that is too small. Give yourself some room to work and give your electronics some breathing room (both thermally and electromagnetically). You'll probably end up with more hair in the long run.

72

Ed Manuel, N5EM
n5em@aol.com

From qrp-1@lehigh.edu Mon Aug 7 19:16:00 1995
From: ges@praxis.ppco.com (ges@240pob)
Subject: [2335] Re: VFO Stability
Message-ID: <9508072250.AA13563@praxis.ppco.com>

Thanks to Steven Wilson for the info about silicone rubber corroding copper, etc. What a surprise - I will have to find a better way to stabilize the vfo in the xmtr I am putting together. It is a vfo/2N3053/IRF510 job and I am just transferring the parts to a real pcb. Steven no doubt saved me a lot of disappointment down the road - proving once again the value of the qrp list.

BTW, a tube of RTV has a warning right on the tube that it will corrode copper and brass!

Glen E. Stockton
Bartlesville, OK

K5UP
ges@ppco.com
